cancerous tumor sample is indicative of a cancer patient who is a candidate for arginine

deprivation therapy and the presence of argininosuccinate synthetase protein in said

cancerous tumor sample is indicative of a cancer patient who is not a candidate for arginine

deprivation therapy.

2.   (Amended) The method of claim 1 wherein prior to, simultaneous with, or after

testing the cancerous tumor sample, the method further comprises the steps of:

c) obtaining a non-cancerous sample of the corresponding tissue from the cancer

patient; and

d) detecting the presence or absence of argininosuccinate synthetase protein in said

non-cancerous sample, wherein the absence of argininosuccinate synthetase protein in said

non-cancerous sample and the absence of argininosuccinate synthetase protein in said

cancerous tumor sample is indicative of a cancer patient who is not a good candidate for

arginine deprivation therapy, wherein the presence of argininosuccinate synthetase protein in

said non-cancerous sample and the absence of argininosuccinate synthetase protein in said

cancerous tumor sample is indicative of a cancer patient who is a good candidate for arginine

deprivation therapy, and wherein the presence of argininosuccinate synthetase protein in said

cancerous tumor sample is indicative of a cancer patient who is not a candidate for arginine

deprivation therapy.

6.   (Amended) The method of claim 1 wherein the presence or absence of

argininosuccinate synthetase protein is detected using a technique selected from the group

consisting of Western blotting, ELISA, enzyme assays, slot blotting, electrophoresis, and

immunohistochemistry.

C_2

7.   (Amended) The method of claim 1 wherein the presence or absence of argininosuccinate synthetase protein is detected using ELISA.

C_3

27.   (Amended) The method of claim 1 wherein argininosuccinate synthetase protein in said cancerous tumor sample is detected comprising the steps of:

a) contacting the cancerous tumor sample of the cancer patient with an antibody specific for an argininosuccinate synthetase protein, or portion thereof; and

b) detecting binding of the antibody to said argininosuccinate synthetase protein, or portion thereof, in said cancerous tumor sample wherein the absence of binding of the antibody to said argininosuccinate synthetase protein is indicative of a cancer patient who is a candidate for arginine deprivation therapy and the presence of binding of the antibody to said argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer patient who is not a candidate for arginine deprivation therapy.

Please cancel claims 3 to 5, 8 to 26, and 28 to 30.

Please add the following new claims.

31.   (New) The method of claim 27 wherein said antibody has a detectable label.

C_4

32.   (New) The method of claim 31 wherein said detectable label is radioactive, fluorescent, or chromomorphic.

33. (New) The method of claim 31 wherein said detectable label is ^{131}I, ^{125}I, ^{14}C, ^{35}S, ^{32}P, or ^{33}P.

34. (New) The method of claim 31 wherein said detectable label is fluorescein, phycolipoprotein, or tetrarhodamine isothiocyanate.

35. (New) The method of claim 31 wherein said detectable label is an enzyme.

36. (New) The method of claim 31 wherein said detectable label has a visible color.

REMARKS

Claims 1 to 30 are pending in the application. Claims 1, 2, 6, 7, and 27 have been amended and claims 3 to 5, 8 to 26, and 28 to 30 have been cancelled, herein. New claims 31 to 36 have been added. Following entry of the amendments, claims 1, 2, 6, 7, 27 and 31 to 36 will be pending in the application.

Applicants respectfully request reconsideration of the rejections of record in view of the foregoing amendments and the following remarks.

Claim Objections

A. Claims 1 and 2 have been objected to as drawn to non-elected subject matter. Claim 1 has been amended to recite methods for identifying cancer patients susceptible to arginine deprivation therapy comprising detecting the presence or absence of argininosuccinate synthetase *protein* in a cancerous tumor sample, rather than reciting detecting the presence or absence of argininosuccinate synthetase *expression*. Similarly,